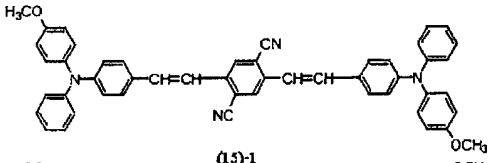
6. The organic electroluminescent element as defined in Claim 1, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer, a luminescent layer, and an electron transfer layer, with at least the luminescent layer in the organic multilayer structure being a layer of a mixture containing at least one species of the aminostyryl compounds represented by the general formula [I] above.

7. A luminescent device in which is used the organic electroluminescent element as defined in any of Claims 1 to 6.

8. The luminescent device as defined in Claim 7, which is constructed for use as a display device.

9. An organic electroluminescent element in which an organic layer having a luminescent region is arranged between an anode and a cathode, characterized in that said organic layer is constructed of at least one layer formed from a mixture containing at least one species of the aminostyryl compounds represented by the following structural formulas (15)-1 to (15)-12, (16)-1 to (16)-12, (17)-1 to (17)-6, and (18)-1 to (18)-6.



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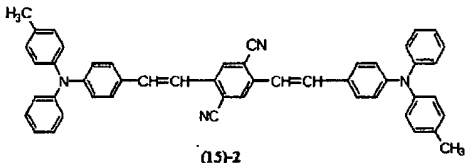

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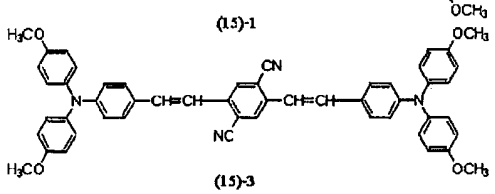

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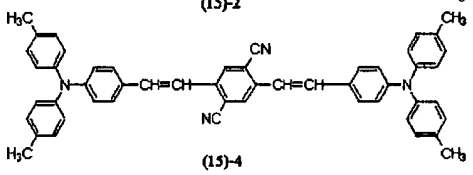

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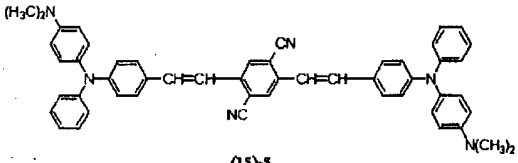

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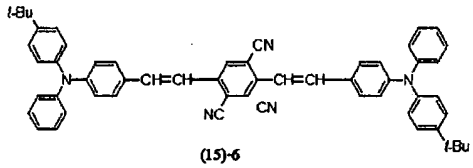

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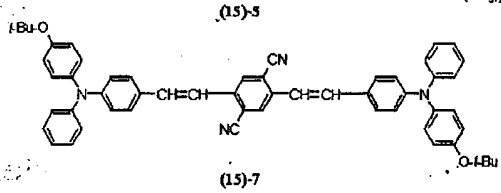

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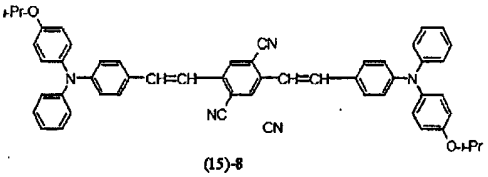

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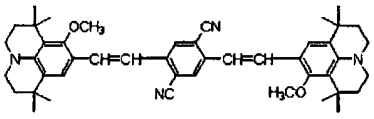

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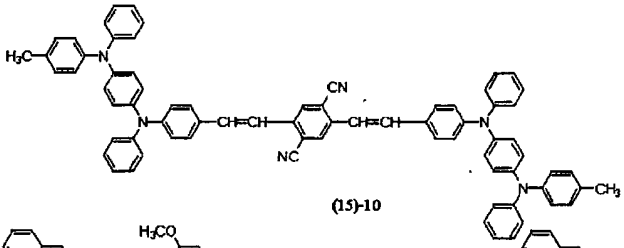

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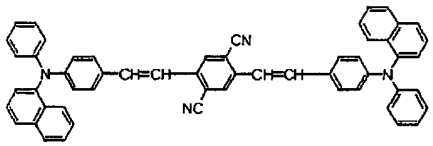

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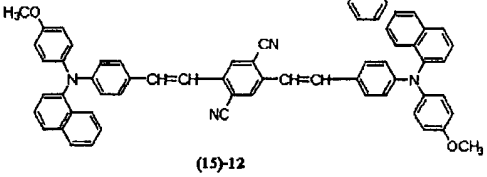

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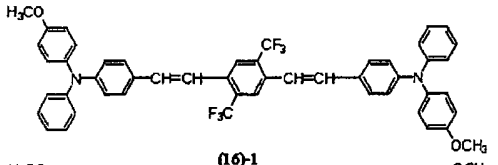

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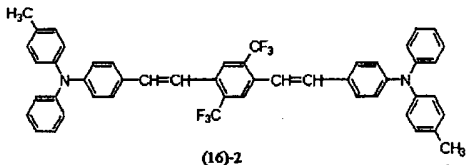

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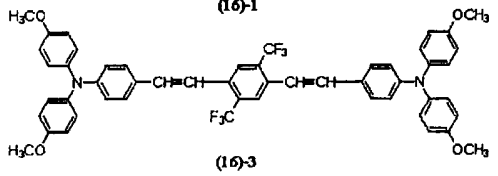

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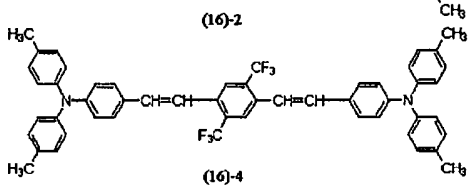

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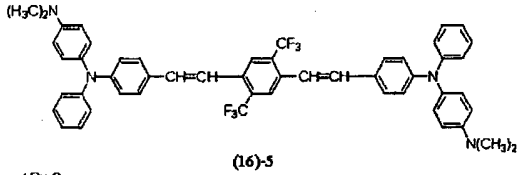

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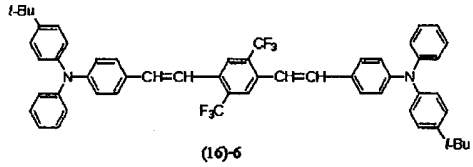

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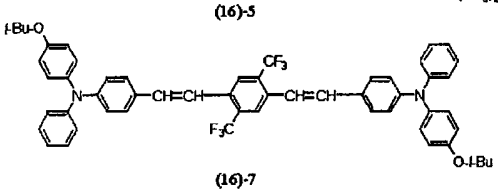

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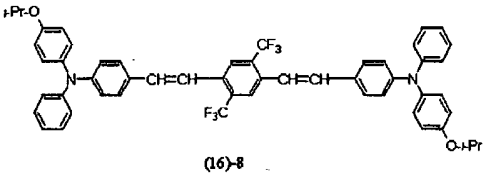

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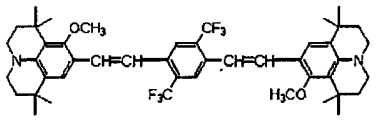

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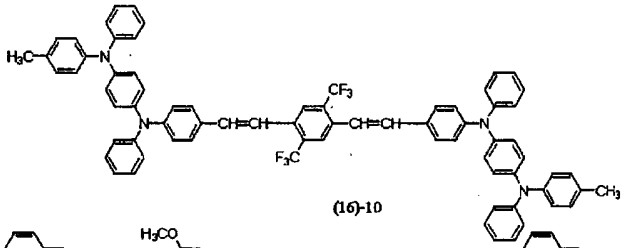

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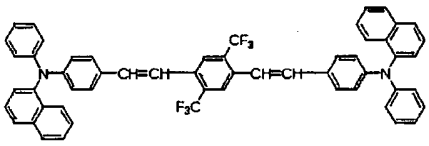

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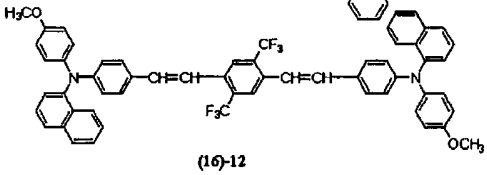

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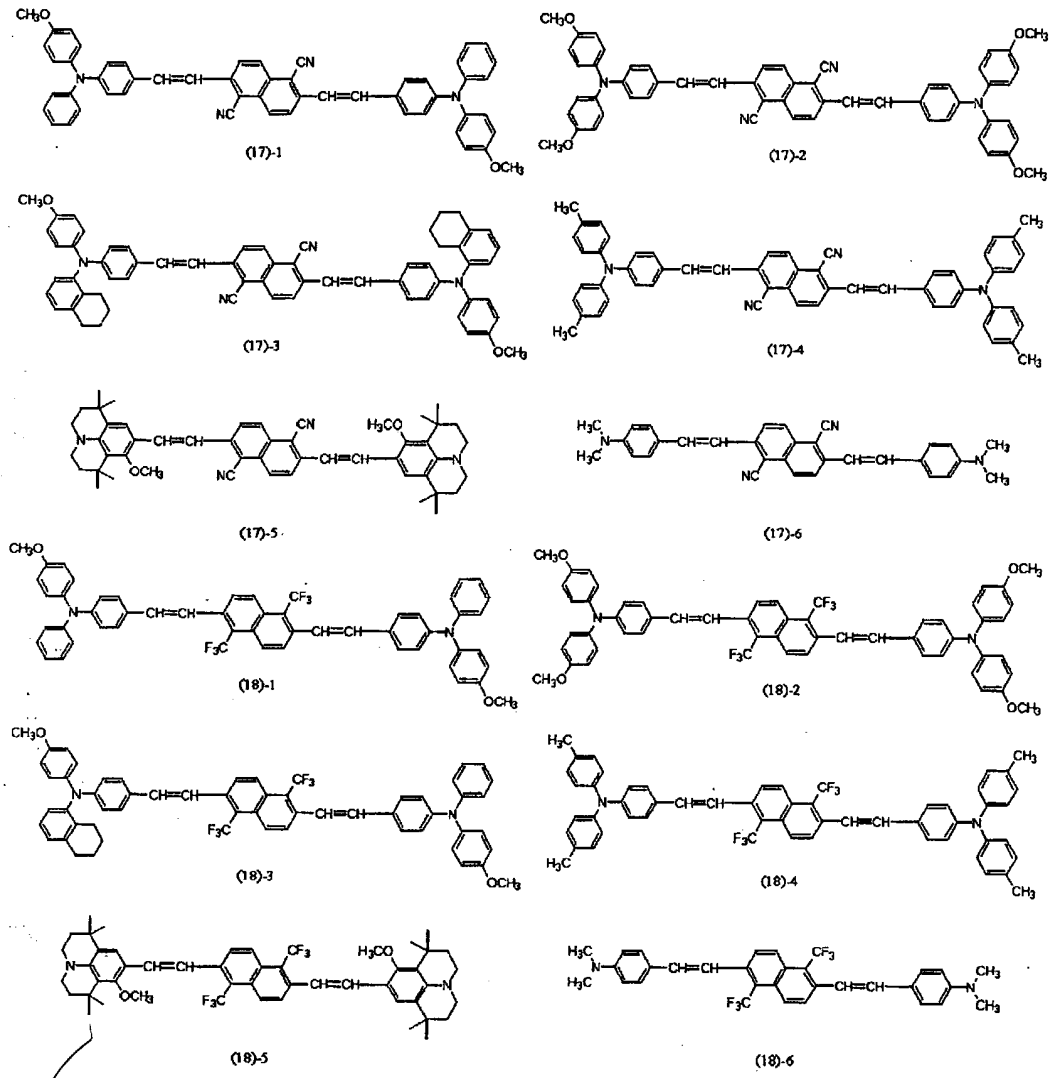


10. The organic electroluminescent element as defined in Claim 9, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with at least the electron transfer layer in the organic multilayer structure being a layer of a mixture containing at least one species said aminostyryl compounds.

11. The organic electroluminescent element as defined in Claim 9, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with at least the hole transfer layer in the organic multilayer structure being a layer of a mixture containing at least one species of said aminostyryl compounds.

12. The organic electroluminescent element as defined in Claim 9, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with the hole transfer layer being a layer of a mixture containing at least one species of the aminostyryl compounds mentioned above, and the electron transfer layer being a layer of a mixture containing at least one species of said aminostyryl compounds.

13. The organic electroluminescent element as defined in Claim 9, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer, a luminescent layer, and an electron transfer layer, with at least the luminescent layer in the organic multilayer structure being a layer of a mixture containing at least one species of said aminostyryl compounds.

14. The organic electroluminescent element as defined in Claim 9, wherein the organic layer is constructed such that at least one layer therein is a layer of a mixture containing said at least one species of the aminostyryl compounds and a

dye emitting red light which has the emission maximum in a range of 600 nm or more.

15. The organic electroluminescent element as defined in Claim 14, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with said at least one layer in the laminate structure being the electron transfer layer.

16. The organic electroluminescent element as defined in Claim 14, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with said at least one layer in the laminate structure being the hole transfer layer.

17. The organic electroluminescent element as defined in Claim 9, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with the hole transfer layer being a layer of a mixture containing at least one species of the aminostyryl compounds and a dye emitting red light which has the emission maximum in the region beyond 600 nm, and the electron transfer layer being a layer of a mixture containing at least one species of the aminostyryl compounds and a dye emitting red light which has the emission maximum in a range of 600 nm or more.

18. The organic electroluminescent element as defined in Claim 9, wherein the

organic layer is of organic multilayer structure composed of a hole transfer layer, a luminescent layer, and an electron transfer layer, with the luminescent layer being a layer of a mixture containing at least one species of the aminostyryl compounds and a dye emitting red light which has the emission maximum in a range of 600 nm or more.

19. A luminescent device in which is used the organic electroluminescent element as defined in any of Claims 9 to 18.

20. The luminescent device as defined in Claim 19, which is constructed for use as a display device.

21. An organic electroluminescent element in which an organic layer having a luminescent region is arranged between an anode and a cathode, characterized in that said organic layer is constructed of at least one layer formed from a light-emitting mixture containing at least one species of the aminostyryl compounds represented by the following general formula [I] and there exists a hole blocking layer adjacent to the cathode of the layer formed from a light-emitting mixture.

General formula [I]

$$Y^1\text{-CH=CH-}X^1\text{-CH=CH-}Y^2$$

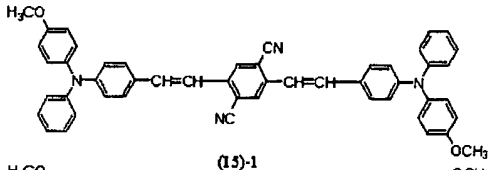
[where, in the general formula [I] above, X^1 denotes any of the following general

luminescent layer, and an electron transfer layer, with at least the luminescent layer in the organic multilayer structure being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds represented by the general formula [I] above.

27. A luminescent device in which is used the organic electroluminescent element as defined in any of Claims 21 to 26.

28. The luminescent device as defined in Claim 27, which is constructed for use as a display device.

29. An organic electroluminescent element in which an organic layer having a luminescent region is arranged between an anode and a cathode, characterized in that said organic layer is constructed of at least one layer formed from a mixture containing at least one species of the aminostyryl compounds represented by the following structural formulas (15)-1 to (15)-12, (16)-1 to (16)-12, (17)-1 to (17)-6, and (18)-1 to (18)-6, and there exists a hole blocking layer adjacent to the cathode of the layer formed from a light-emitting mixture.



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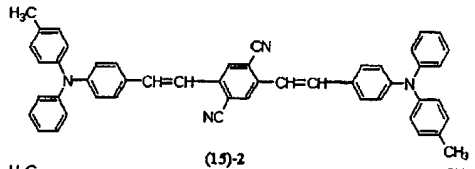

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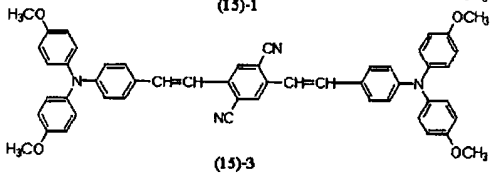

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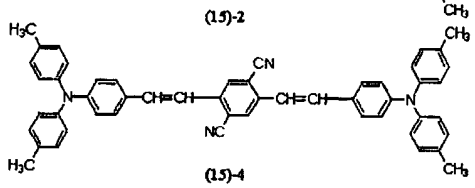

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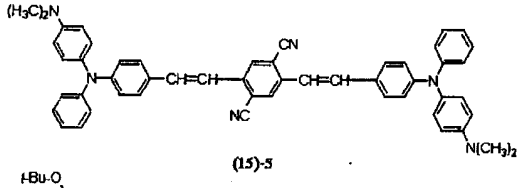

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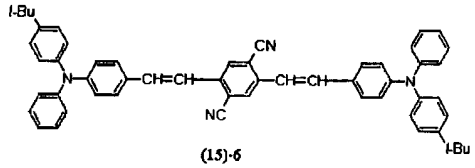

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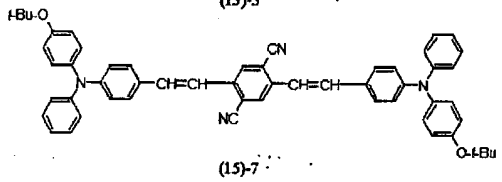

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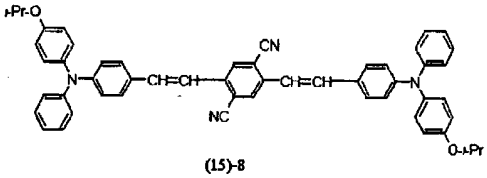

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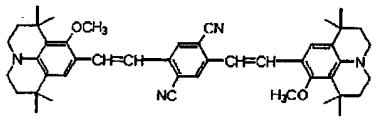

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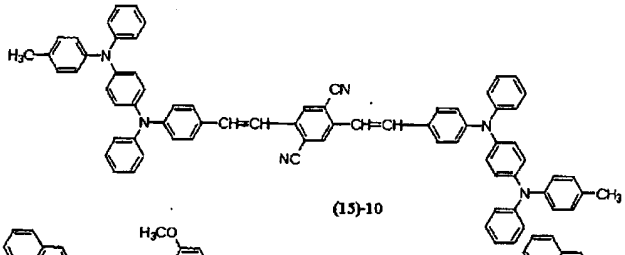

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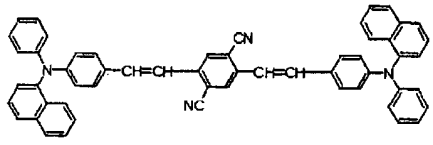

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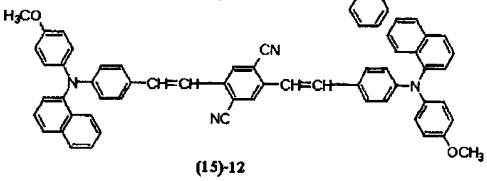

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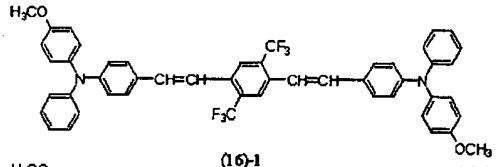

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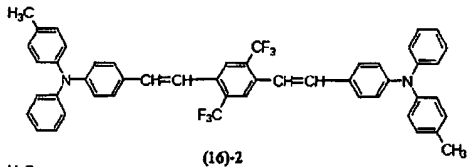

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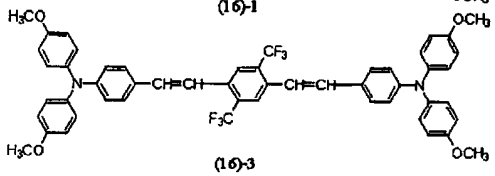

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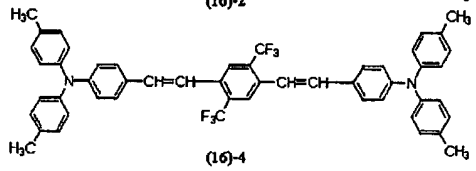

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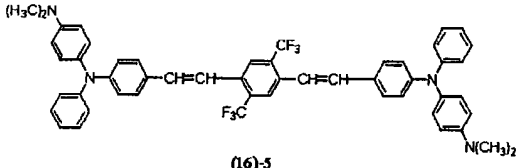

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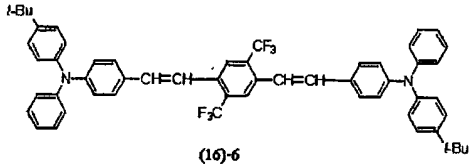

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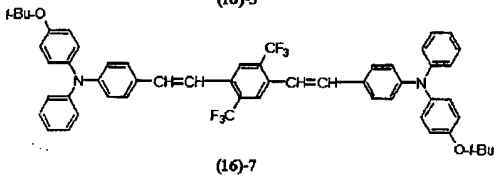

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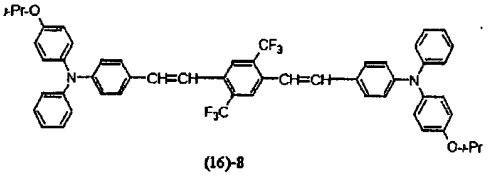

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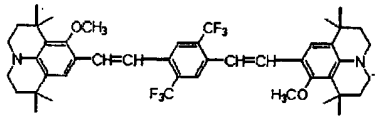

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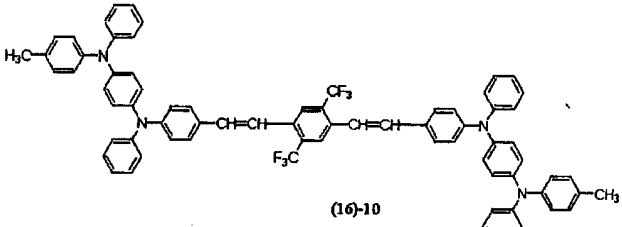

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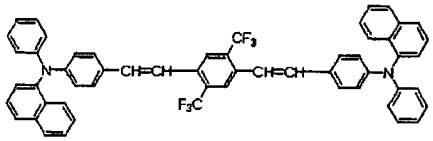

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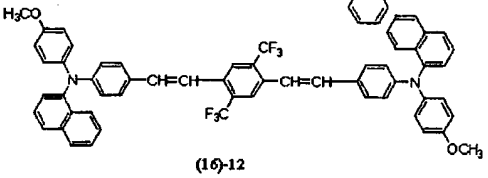

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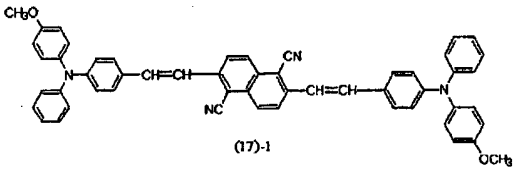

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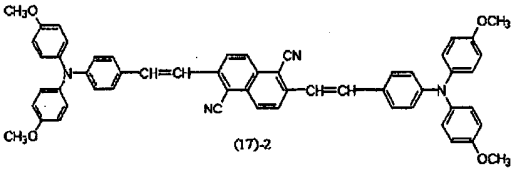

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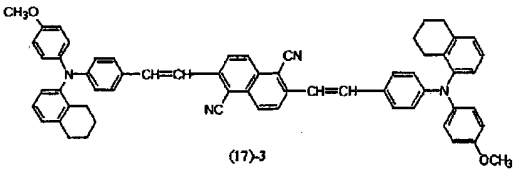

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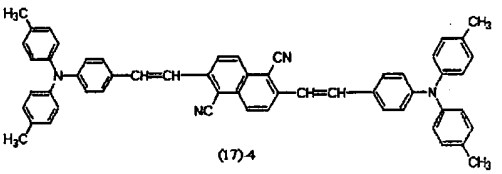

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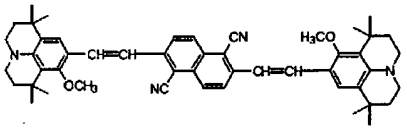

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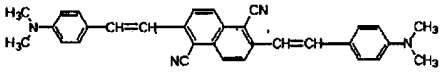

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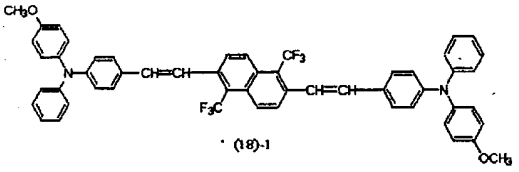

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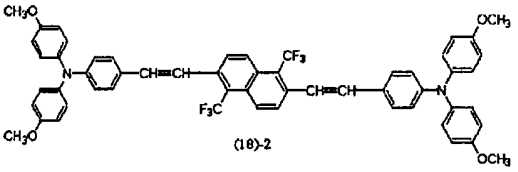
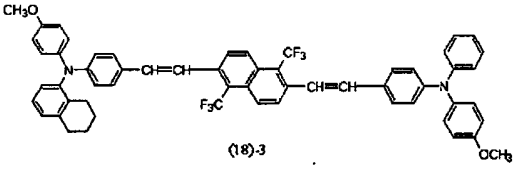


(18)-2



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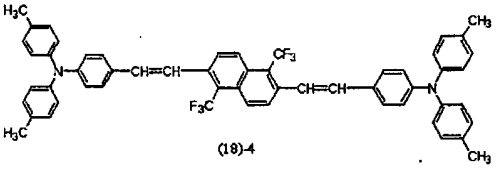

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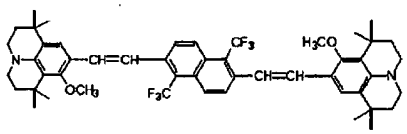
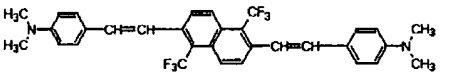


(18)-5



(18)-6

30. The organic electroluminescent element as defined in Claim 29, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with at least the electron transfer layer in the organic multilayer structure being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds.

31. The organic electroluminescent element as defined in Claim 29, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with at least the hole transfer layer in the organic multilayer structure being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds.

32. The organic electroluminescent element as defined in Claim 29, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with the hole transfer layer being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds mentioned above, and the electron transfer layer being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds mentioned above, and there exists the hole blocking layer adjacent to the cathode of the layer formed from a light-emitting mixture capable of electron transfer.

33. The organic electroluminescent element as defined in Claim 29, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer, a luminescent layer, and an electron transfer layer, with at least the luminescent layer in the organic multilayer structure being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds.

34. The organic electroluminescent element as defined in Claim 29, wherein the organic layer is constructed such that said at least one layer therein is the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds and a dye emitting red light which has the emission maximum in the range of 600 nm or more.

35. The organic electroluminescent element as defined in Claim 34, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with said at least one layer in the laminate structure being then electron transfer layer.

36. The organic electroluminescent element as defined in Claim 34, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with said at least one layer in the laminate structure being the hole transfer layer.

37. The organic electroluminescent element as defined in Claim 29, wherein the

organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with the hole transfer layer being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds and a dye emitting red light which has the emission maximum in the region beyond 600 nm, and the electron transfer layer being a layer of a light-emitting mixture containing at least one species of the aminostyryl compounds and a dye emitting red light which has the emission maximum in a range of 600 nm or more, and there exists the hole blocking layer adjacent to the cathode of the layer formed from a light-emitting mixture capable of electron transfer.

38. The organic electroluminescent element as defined in Claim 29, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer, a luminescent layer, and an electron transfer layer, with the luminescent layer being the layer of a light-emitting mixture containing at least one species of the aminostyryl compounds and a dye emitting red light which has the emission maximum in a range of 600 nm or more.

39. A luminescent device in which is used the organic electroluminescent element as defined in any of Claims 29 to 38.

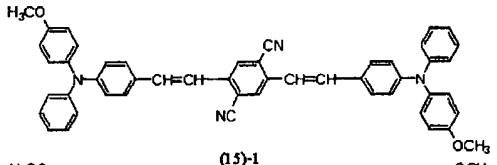
40. The luminescent device as defined in Claim 39, which is constructed for use

luminescent layer, and an electron transfer layer, with at least the luminescent layer in the organic multilayer structure being a layer of said aminostyryl compound.

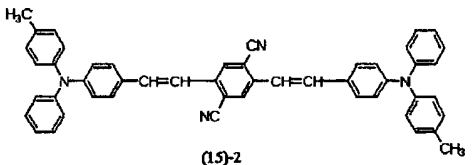
47. A luminescent device in which is used the organic electroluminescent element as defined in any of Claims 41 to 46.

48. The luminescent device as defined in Claim 47, which is constructed for use as a display device.

49. An organic electroluminescent element in which an organic layer having a luminescent region is arranged between an anode and a cathode, characterized in that said organic layer is constructed of at least one layer formed from an aminostyryl compound selected from the aminostyryl compounds represented by the following structural formulas (15)-1 to (15)-12, (16)-1 to (16)-12, (17)-1 to (17)-6, and (18)-1 to (18)-6, and there exists a hole blocking layer adjacent to the cathode of the layer of said aminostyryl compound.



(15)-1



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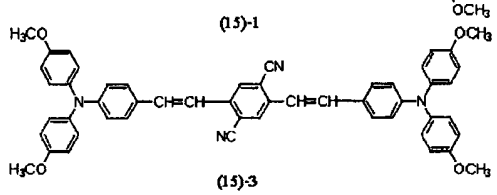

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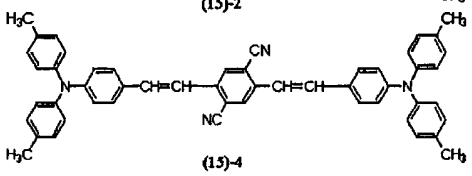

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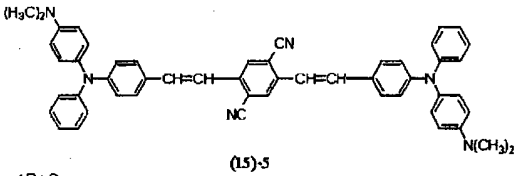

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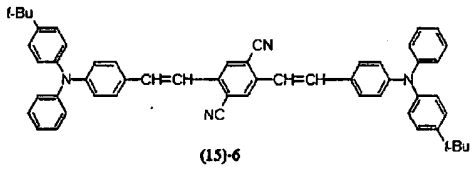
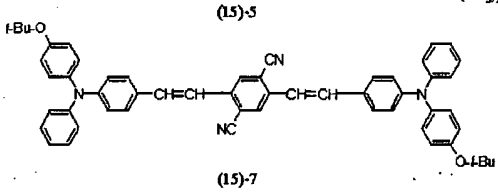
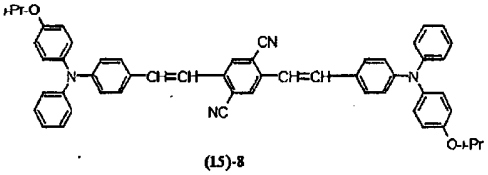


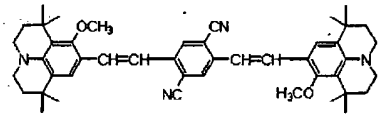
(15)-6



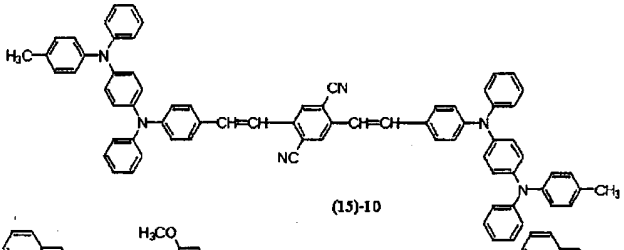
(15)-7



(15)-8



(15)-9



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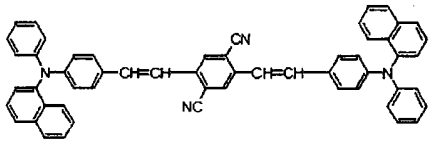

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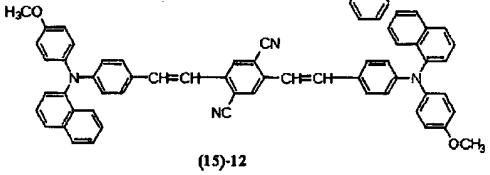
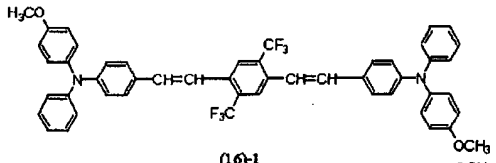


(15)-12



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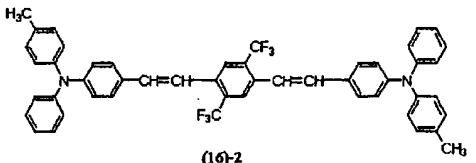

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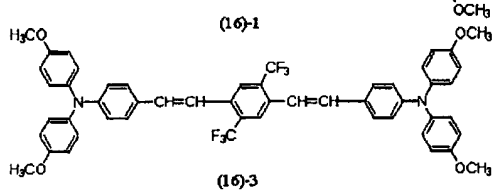

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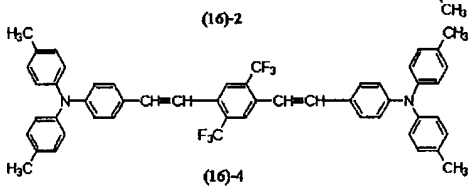
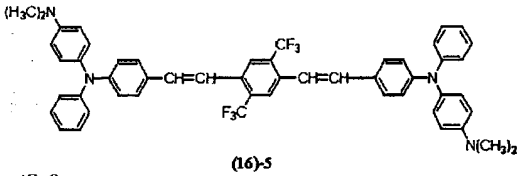


(16)-4



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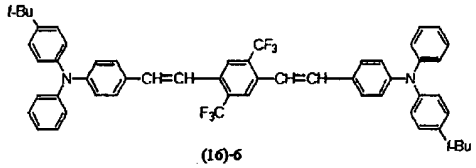
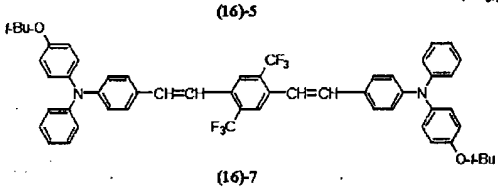


(16)-6



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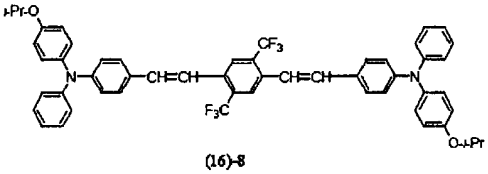

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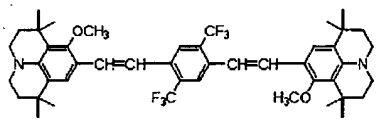

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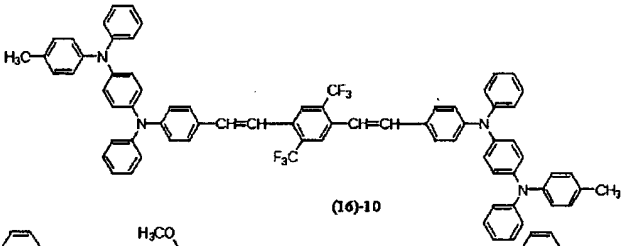
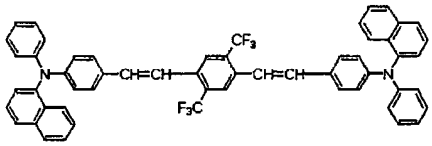


(16)-10



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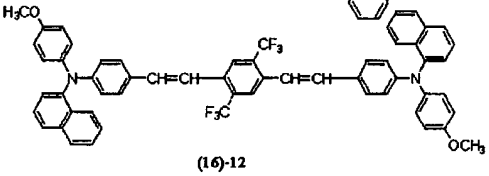

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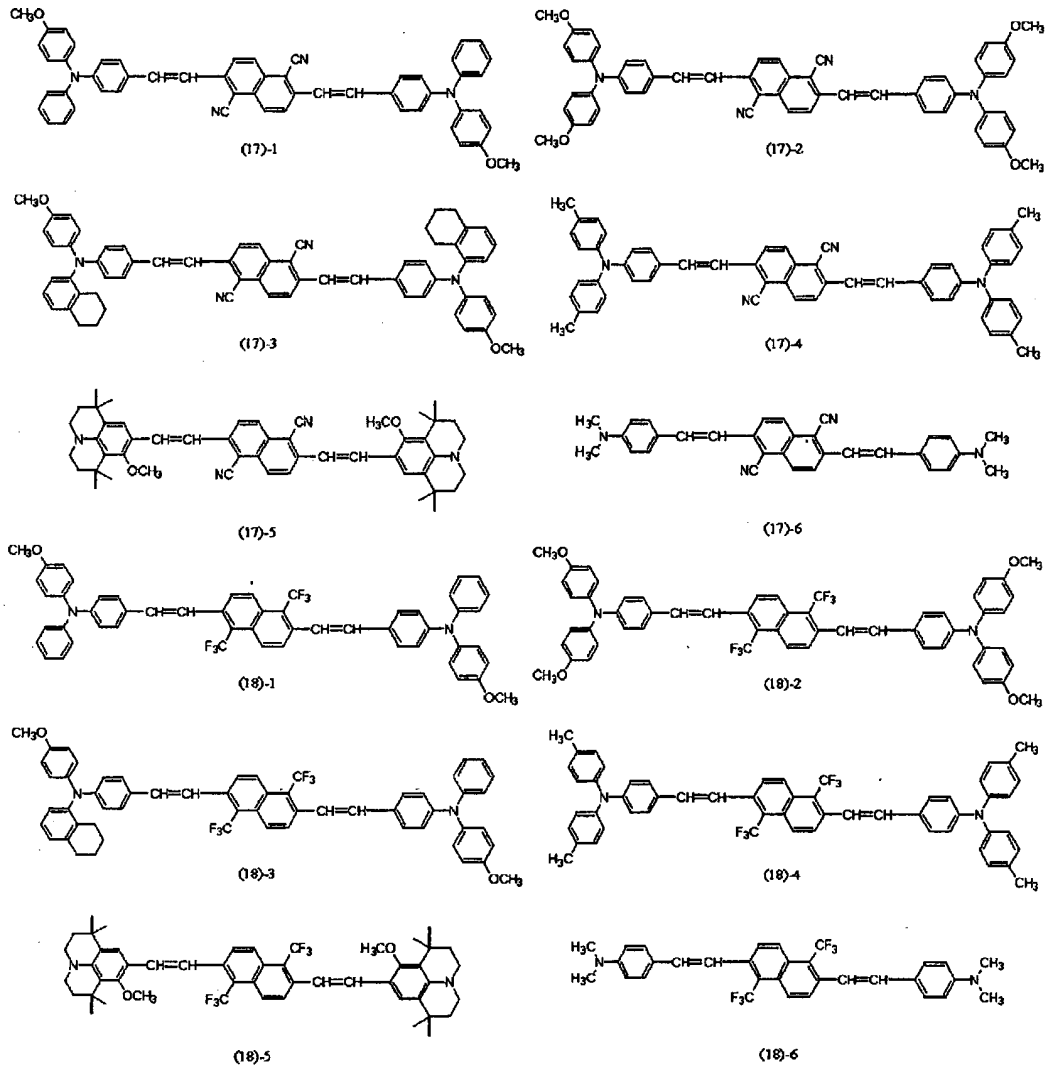


50. The organic electroluminescent element as defined in Claim 49, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with at least the electron transfer layer in the organic multilayer structure being a layer of said aminostyryl compound.

51. The organic electroluminescent element as defined in Claim 49, wherein the

organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with at least the hole transfer layer in the organic multilayer structure being a layer of said aminostyryl compound.

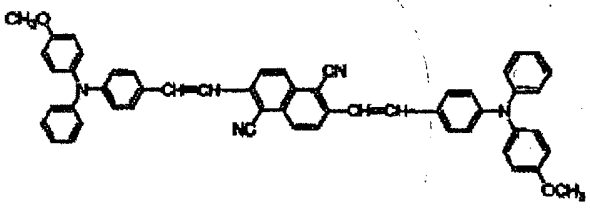
52. The organic electroluminescent element as defined in Claim 49, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer and an electron transfer layer, with the hole transfer layer being a layer of said aminostyryl compound, and the electron transfer layer being a layer of said aminostyryl compound, and there exists the hole blocking layer adjacent to the cathode of the layer of aminostyryl compound capable of electron transfer.

53. The organic electroluminescent element as defined in Claim 49, wherein the organic layer is of organic multilayer structure composed of a hole transfer layer, a luminescent layer, and an electron transfer layer, with at least the luminescent layer in the organic multilayer structure being a layer of said aminostyryl compound.

54. A luminescent device in which is used the organic electroluminescent element as defined in any of Claims 49 to 53.

55. The luminescent device as defined in Claim 54, which is constructed for use as a display device.

Structural formula (17)-1:



The organic electroluminescent element was identical with that of Example 2 in layer structure and method of film formation.

The organic electroluminescent element of Example 14 produced in this manner was examined for luminescent characteristics by applying a forward bias dc voltage in a nitrogen atmosphere. It emitted red light. By spectral analysis in the same way as in Example 1, the emitted light was found to have the luminescent peak at about 620 nm. In addition, the emitted light was found to have a luminance of 1500 cd/m^2 at 8V according to the measurements of luminance at various voltages.

The organic electroluminescent element was allowed to stand for one month in a nitrogen atmosphere after it had been produced. It remained intact without any sign of deterioration. For accelerated deterioration, the element with an initial luminance of 200 cd/m^2 was allowed to emit light continuously by application of constant current. It took 800 hours for the element to decrease in luminance by half.